

Species						
Scientific name	Common name	Historic range	Status	When listed	Critical habitat	Special rules
Violaceae—Violent family.....						
<i>Isodendron hosakae</i>	Aupaka.....	U.S.A. (HI)	E	414	NA	NA

Dated: December 21, 1990.

Bruce Blanchard,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 91-785 Filed 1-11-91; 8:45 am]

BILLING CODE 4310-55-M

50 CFR Part 17

RIN 1018-AB38

Endangered and Threatened Wildlife and Plants; Endangered Status for the Florida Salt Marsh Vole

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines the Florida salt marsh vole (*Microtus pennsylvanicus dukecampbelli*) to be an endangered species pursuant to the Endangered Species Act (Act) of 1973, as amended. The vole is known only from one site in Levy County, Florida. The population level is very low, and the species could be extirpated by storm events. This action implements the protection of the Act for the Florida salt marsh vole.

EFFECTIVE DATE: February 13, 1991.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Jacksonville Field Office, U.S. Fish and Wildlife Service, 3100 University Boulevard South, Suite 120, Jacksonville, Florida 32216.

FOR FURTHER INFORMATION CONTACT: Mr. David J. Wesley, Field Supervisor, at the above address (telephone 904/791-2580; FTS 946-2580).

SUPPLEMENTARY INFORMATION:

Background

The Florida salt marsh vole (*Microtus pennsylvanicus dukecampbelli*) was described in 1982 (Woods *et al.* 1982) based on specimens from near Cedar Key, Levy County, Florida. It is a small (178-198 mm in total length), short-tailed rodent with a blunt head and short ears. The fur is black-brown dorsally and dark gray ventrally. The Florida salt marsh vole is related to the widespread meadow vole (*Microtus p. pennsylvanicus*). It differs from that subspecies in its larger size, darker

coloration, relatively smaller ears, and certain skull characteristics. Most of the known information on the Florida salt marsh vole comes from Woods *et al.* (1982), who discovered the vole during seaside sparrow (*Ammodramus maritimus*) studies in west coast Florida marshes. The following background information is based on those authors.

The vole is known from only one site, where it occurs in a salt marsh with vegetation consisting of smooth cordgrass (*Spartina alterniflora*), black rush (*Juncus roemerianus*), and saltgrass (*Distichlis spicata*). The nearest existing population of *Microtus pennsylvanicus* to the salt marsh vole is located approximately 500 kilometers to the north in Georgia. However, fossil *Microtus pennsylvanicus* have been found in late Pleistocene deposits at four sites in Alachua, Citrus, and Levy Counties in Florida, indicating a much more extensive distribution in Florida in the past. The ages of these fossils may be from 8,000-30,000 years before the present. Lower sea levels in the past exposed large areas of coastal lands along Florida's west coast that are now submerged. About 10,000 years ago, sea level may have been 25 meters lower than at present, exposing land as far as 100 kilometers west of the current shoreline. This coastal corridor is believed to have consisted of savanna and prairie vegetation that would have provided much more extensive meadow vole habitat than now exists. The Florida salt marsh vole is believed to represent a relictual population that has persisted at the Waccasassa Bay site after a long-term reduction in range. Woods *et al.* (1982) concluded that the salt marsh vole existed in low numbers under harsh ecological conditions and was vulnerable to natural storm events. This view is supported by the fact that, following a hurricane passing through the Waccasassa Bay area in 1985, only one salt marsh vole was taken during intensive trapping in 1987 and 1988 (Woods 1988).

Service involvement with the Florida salt marsh vole began with the inclusion of this species in category 2 of its vertebrate review notice published on September 18, 1985 (50 FR 37958); the vole was retained in the same category in the Service's animal review notice

published on January 6, 1989 (54 FR 554). Category 2 species are those for which the Service believes that listing may be appropriate, but for which additional biological data are necessary to support a proposed listing regulation. Additional searches for this species were subsequently done under contract with the Service's Cooperative Fish and Wildlife Research Unit (Woods 1988) and by the Service's Jacksonville, Florida, Field Office (Bentzen 1989). The Service proposed to list the Florida salt marsh vole as an endangered species on April 11, 1990 (55 FR 13576).

Summary of Comments and Recommendations

In the April 11, 1990, proposed rule and associated notifications, all interested parties were requested to submit factual reports of information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published in the *Levy County Journal* in Bronson, Florida, on April 26, 1990; and in the *Gainesville Sun* in Gainesville, Florida, on April 29, 1990. On June 8, 1990, the trustee of the land where the Florida salt marsh vole occurs requested that the comment period be extended because he had been out of town during the comment period. On August 17, 1990 (55 FR 33737), the Service reopened the comment period on the proposal.

Two comments were received. The Florida Game and Fresh Water Fish Commission supported the listing of the Florida salt marsh vole as an endangered species. An attorney representing the trustee of the land where the vole occurs commented in regard to the following issues: Since only a single male vole was trapped in the last survey of the property, there can be no reproduction occurring on the site. Since that individual vole is unlikely to survive at the present time, no colony can now exist at the site. The single specimen taken was in mixed habitat, suggesting integration (sic). If future research shows the species to exist on the property, the Service should provide

a map with a specific legal description and geographical limitations of habitat. The property should be removed from the protected file and from registration on the Federal Register. Service response: Small mammal trapping is a sampling method that is unlikely to ever capture all the individuals in a population. The fact that single male vole was trapped does not indicate that the population consisted of one animal, but does indicate that the population level was probably low. The animal was captured in smooth cordgrass (*Spartina alterniflora*)-saltgrass (*Distichlis spicata*) habitat, which is typical for this subspecies (Woods *et al.* 1982). There are no specific requirements on the type of maps the Service maintains pertaining to proposed or listed species, nor does the Service typically research and record legal descriptions of properties where such species occur. The proposal or listing of a species pursuant to the Act does not register properties or place them in a protected file. The potential effects of the listing are discussed in the "Available Conservation Measures" below. Critical habitat has not been designated for the Florida salt marsh vole (see "Critical Habitat" section below).

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the Florida salt marsh vole should be classified as an endangered species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the Florida salt marsh vole (*Microtus pennsylvanicus dukecampbelli*) are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range. The Florida salt marsh vole is restricted to a single known site in the salt marsh of Waccasassa Bay, Levy County, Florida. Woods *et al.* (1982) were able to trap only 31 individuals; subsequent trapping efforts at the site located only one individual (Woods 1988). Trapping efforts for small rodents elsewhere in the coastal salt marshes of Citrus and Levy Counties has not yielded voles (Bentzen 1989). The Levy County population appears to represent a small remnant of a formerly wide-ranging

population (Woods *et al.* 1982). The decline of the species appears natural, due to climatic changes and an associated rise in sea level. Prairie habitats, widespread on the much larger Pleistocene Florida peninsula, have become woodland unsuited to meadow voles.

B. Overutilization for commercial, recreational, scientific, or educational purposes. Not applicable.

C. Disease or predation. Not applicable.

D. The inadequacy of existing regulatory mechanisms. The Florida salt marsh vole is considered a species of special concern by the Florida Game and Fresh Water Fish Commission (Chapter 39-27.05, Florida Administrative Code). This final rule adds the recovery and protection measures available under the Endangered Species Act.

E. Other natural or manmade factors affecting its continued existence. The principal threat to the Florida salt marsh vole is loss of the single known population from storm events or from population fluctuations. In August 1985, Hurricane Elena remained stationary off the coast of Waccasassa Bay for 24 hours, and may have accounted for the decline of the Florida salt marsh vole observed between the 1981 and 1987 surveys. A single such storm event could easily extirpate the single known population of the vole. The population may currently be at such a low level that little genetic diversity remains. Woods *et al.* (1982) found little genetic variability in 14 specimens of the Florida salt marsh vole examined for alloenzymes.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list the Florida salt marsh vole as an endangered species. The single known population is in danger of extinction in the foreseeable future, due to natural causes.

Critical Habitat

Section 4(a)(3) of the Act requires, to the maximum extent prudent and determinable, that the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for the Florida salt marsh vole. This subspecies is known only from a single restricted site and currently exists in very small numbers. Publishing critical habitat maps in the Federal Register could increase the chance of

illegal collecting or attract trespass on the private land where the vole occurs. All involved parties and the landowner have been notified of the location and importance of protecting this species' habitat. Habitat protection will be addressed through the section 7 jeopardy standard. There would be no net offsetting benefit in designating critical habitat for this species; therefore, it would not be prudent to do so.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

No Federal involvement is currently known with regard to the Florida salt marsh vole. The area where it occurs is within the jurisdiction of the U.S. Army Corps of Engineers (Corps) permitting program, pursuant to the Clean Water Act. Dredge and fill activities in this area would require a Corps permit. No development plans are known for the area, however.

The Act and its implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part,

make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, for incidental take in connection with otherwise lawful activities, and/or for prevention of undue economic hardship.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental

Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

References Cited

- Bentzen, M.M. 1989. Florida saltmarsh vole survey. Unpub. rep., U.S. Fish and Wildlife Service, Jacksonville, Florida, 5 pp.
- Woods, C.A. 1988. Status surveys of the Florida saltmarsh vole. Rep. to U.S. Fish and Wildlife Service under Cooperative Agreement No. 14-16-0009-1544. 6 pp.
- Woods, C.A., Post, and C.W. Kilpatrick. 1982. *Microtus pennsylvanicus* (Rodentia: Muridae) in Florida: a Pleistocene relict in a coastal saltmarsh. *Bull. Florida St. Mus., Biol. Sci.* 28(2):25-52.

Author

The primary author of this rule is Dr. Michael M. Bentzen (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.11(h) by adding the following, in alphabetical order under MAMMALS, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

(h) * * *

Species		Historic range	Vertebrate population were endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
Vole, Florida salt marsh	<i>Microtus pennsylvanicus du-kecampbelli</i>	U.S.A.(FL)	Entire	E	415	NA	NA

Dated: December 7, 1990

Bruce Blanchard,

Acting Director, Fish and Wildlife Service.

[FR Doc. 91-786 Filed 1-11-91; 8:45 am]

BILLING CODE 4310-55-M

50 CFR Part 17

RIN 1018-AB42

Endangered and Threatened Wildlife and Plants: Threatened Status for the Yellow-Blotched Map Turtle, *Graptemys flavimaculata*

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines the yellow-blotched map turtle, *Graptemys flavimaculata*, to be a threatened species under the Endangered Species Act (Act) of 1973, as amended. This basking turtle is only known from the

Pascagoula River system in southeast Mississippi. It is threatened by habitat modification, wanton shooting, collecting, water quality degradation, and nest predation. This rule implements the full protection of the Act for the yellow-blotched map turtle.

EFFECTIVE DATE: February 13, 1991.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Jackson Field Office, U.S. Fish and Wildlife Service, 6578 Dogwood View Parkway, Suite A, Jackson, Mississippi 39213.

FOR FURTHER INFORMATION CONTACT: Ren Lohofener at the above address (601/965-4900 or FTS 490-4900).

SUPPLEMENTARY INFORMATION:

Background

The yellow-blotched map turtle (*Graptemys flavimaculata*) was described from the Pascagoula River in George County, Mississippi (Cagle 1954). It is restricted to the Pascagoula River

system in Mississippi, including the Leaf, Chickasawhay, and Escatawpa Rivers and other tributaries (Cagle 1954, Cliburn 1971, and McCoy and Vogt 1980). A survey of herpetologists and museums by the Service did not find any records of this species outside the Pascagoula River system. The only other name applied to this species is the yellow-blotched sawback turtle.

The yellow-blotched map turtle is a member of the narrow-head complex of *Graptemys*. It is a medium-sized aquatic turtle with females attaining a carapace size of at least 8 centimeters (cm) (3 inches) and males occasionally exceeding 4.25 cm (1.9 inches). The carapace is olive to light brown. Each costal scute usually has an irregular bright yellow or orange blotch. Juveniles and adult males have a black spine on the first four vertebral scutes. These spines may be lost in adult females. The closely related ringed sawback, *Graptemys oculifera*, and black-knobbed map turtle, *Graptemys*

nigrinoda, lack the solid blotches, have different patterns on the head, and usually have a light-colored ring on each costal.

The yellow-blotched map turtle requires rivers that are large enough to have an open canopy allowing for several hours of sunshine daily. The preferred habitat is a moderate current, a sand or clay substrate, sand bars or beaches for nesting, and snags or other structure for basking. This species feeds largely on snails and insects (Ernst and Barbour 1972). Growth is rapid and males may mature in the second growing season.

Cagle (1954) was unable to determine the age of maturity in females. Lahanas (1982) inferred that female *G. nigrinoda* mature at 8 or 9 years of age. Webb (1961) found that female *G. ouachitensis*, another closely related species in Lake Texoma, Oklahoma, matured at 6 or 7 years of age. Little is known about the reproduction of the yellow-blotched map turtle. The most definitive work on a related species was by Lahanas (1982) on *G. nigrinoda*. He found that this species produced 3 or 4 clutches annually with an average clutch size of 5-6 eggs. Cagle (1953) collected a *G. oculifera* female that had 3 eggs in the oviduct and 4 enlarged follicles. This turtle would probably have produced 7 eggs during the breeding season. Jones and Hartfield (1989) found a complete clutch laid by *G. oculifera* that contained 6 eggs. It is likely that *G. flavimaculata* is similar to these closely related turtles in reproductive parameters.

The Pascagoula River Basin includes 9,700 square miles (U.S. Army Corps of Engineers (USACE) 1987) with a wide variety of land uses. Much of the area is in private ownership and agricultural production. The U.S. Forest Service (USFS) manages significant acreage in DeSoto National Forest. The Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) owns or manages several wildlife management areas in the basin.

Historic population status for this species is primarily limited to the work of Cliburn (1971), McCoy and Vogt (1980), and a 1989 survey conducted by biologists from the Service and the Mississippi Department of Wildlife, Fisheries, and Parks. Cliburn (1971) reported this species from Red, Black, and Tallahala Creeks of the Pascagoula River drainage. McCoy and Vogt (1980) did not find any yellow-blotched map turtles in their survey of these streams and reported the habitat to be marginal. McCoy and Vogt reported decreasing numbers of two stations on the Chickasawhay River over a three year

period. In two basking surveys on the Chickasawhay River, Service biologists in 1989, observed 43 and 60 yellow-blotched map turtles in approximately 20 river miles. This survey area included one of the sites where this species was reported in decline by McCoy and Vogt (1980). The Service survey was more extensive than that of McCoy and Vogt and, as a result, observed more yellow-blotched map turtles over the survey area. However, the number of yellow-blotched map turtles per river mile in the Chickasawhay River was three or less, a figure comparable to that observed by McCoy and Vogt.

In the basking survey conducted by Service biologists along 54 river miles of the Leaf and Pascagoula Rivers and 20 river miles of the Chickasawhay River, there were less than four yellow-blotched map turtles observed per river mile. In the lower Pascagoula River, a mark and recapture study by Service and Mississippi Department of Wildlife, Fisheries, and Parks biologists observed up to 70 yellow-blotched map turtles per river mile. The estimate for total numbers of this species, based upon the mark-recapture study, was as high as 336 per mile in the lower Pascagoula River. This figure is low when compared with estimates of 549 *G. oculifera* (listed as threatened) per mile in good habitat and 230 per mile in poor habitat.

The increase in population of the yellow-blotched map turtle seems to occur in the vicinity of Wade and proceeds downstream for a distance of about 18 river miles. In this stretch, there are several short tributaries where this species occurs. However, these populations are likely dependent upon the main river population for viability. Turtles less than four years old were seldom observed or trapped in the lower Pascagoula River. This could indicate a problem with reproduction and recruitment. If this problem exists, it may be due to limited nesting habitat or to high nest predation. The most abundant population of this species, based upon observations by Service biologists, occurs in the Pascagoula River between Wade and Vancleave, Mississippi.

The yellow-blotched map turtle was listed as a category 1 candidate in the notice of review published in the *Federal Register* on December 30, 1982 (47 FR 58454) and as a category 2 candidate in the notice of review published in the *Federal Register* on September 18, 1985 (50 FR 37958) and on January 6, 1989 (54 FR 554). A category 1 candidate is a taxon for which the Service currently has substantial information on hand to support the biological appropriateness of proposing

to list. A category 2 candidate is a taxon for which information now in possession of the Service indicates that proposing to list the species is possibly appropriate, but for which substantial data are not currently available. Based on additional status information, a proposed rule to classify *Graptemys flavimaculata* as threatened was published on July 11, 1990, in the *Federal Register* (55 FR 28570).

Summary of Comments and Recommendations

In the July 11, 1990, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published in the "Mobile Press Register," Mobile, Alabama, on July 21, 1990 and in the "Clarion-Ledger," Jackson, Mississippi, on July 23, 1990. Two comments were received and neither provided additional biological data. A conservation organization endorsed the proposed rule. A Federal agency felt that the listing action could have a severe impact on Federal flood control projects and requested advice on effects of the listing action. The Service recognizes these concerns and notes that the Act requires a listing decision be made only on the best available biological information. The Service's project-specific advice to Federal agencies will be through the normal section 7 process.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the yellow-blotched map turtle should be classified as a threatened species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the yellow-blotched map turtle, *Graptemys flavimaculata*, are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The yellow-blotched map turtle must have

structures on which it can bask and be safe from predation, and have suitable nesting habitat. Basking structures are logs, snags, and other debris commonly occurring in streams. These structures also serve as habitat for food organisms. Nesting is believed to occur on sand beaches well above the water level and near the vegetation line. Navigation and flood control measures often require the removal of basking structures and nesting beaches to deepen the channel and to remove restrictions to water flow. Gravel dredging removes sand and affects potential nesting sites. Increased turbidity and sedimentation impact the snails and insects upon which this species feeds. There are several channel modification projects on or planned for tributary streams that have the potential to impact the habitat of this species (USACE 1987). A clearing and snagging project has impacted 2.37 miles of the Leaf River channel at Hattiesburg. Selective snagging of 7.25 miles of Tallahala Creek to provide flood control for Laurel was approved in 1987. Flood control projects have been conducted or planned for Sowashee Creek at Meridian, Gordon's Creek and Upper Gordon's Creek at Hattiesburg, and Green's Creek at Petal. Studies for flood control projects on Mixon's Creek, Lamar County, and Mill Creek at Sumrall are ongoing. Four existing reservoirs have modified portions of the drainage and affect water flows. There are authorized reservoirs on Tallahala Creek and Bowie River that have been determined not economically feasible, but have not been de-authorized. An active and extensive gravel mining operation in the Bowie River near its confluence with the Leaf River undoubtedly contributes to sedimentation in downstream reaches of the Leaf River. Turbidity and sedimentation may occur from clear cutting timber and agricultural activities.

B. Overutilization for commercial, recreational, scientific or educational purposes. Wanton shooting (use of basking turtles for target practice) and collecting pose a threat to the yellow-blotched map turtle. This threat becomes more serious as the population declines. An increasing public awareness of the species' plight on the part of many scientists seems to be reducing the threat from scientific and educational collecting. Collecting for commercial purposes is a more serious threat. This very attractive turtle has been advertised for retail sale at \$65 each. It is very vulnerable to knowledgeable commercial collectors, who can seriously damage a local population in a short period.

C. Disease or predation. There is no known threat from disease. This species is subject to natural predation. Lahanas (1982) found 82 percent mortality of eggs of *G. nigrinoda* from predation, primarily by fish crows. Other authors have found predation of turtle eggs ranging from 90 to 100 percent (Cagle 1950, Moll and Legler 1971, Shealy 1976, Vogt 1980). Lahanas attributed the lower predation rate he observed to his frequent presence on the nesting beaches. While conducting a mark and recapture study of the ringed sawback, Service biologists estimated, from casual observation, that 95 percent of nests were destroyed by predators. A serious threat to adult turtles is wanton shooting as discussed in Factor "B". The alteration and degradation of habitat as discussed in Factors "A" and "E" make predation, wanton shooting, and collecting more significant threats to the yellow-blotched map turtle than they would be otherwise.

D. The inadequacy of existing regulatory mechanisms. The yellow-blotched map turtle is listed as endangered under Mississippi Department of Wildlife, Fisheries, and Parks Public Notice 2779. Because of this State protection, the Lacey Act (16 U.S.C. 3401-3408) applies to the taking and transportation of this species from Mississippi. A State collecting permit is required for taking this species. Compliance with these regulations is extremely difficult to enforce due to other law enforcement priorities and the difficulty of proving a violation if the species has been removed from the river. The loss or alteration of habitat is the more serious threat to the yellow-blotched map turtle. No regulations requiring consideration of this species during project planning yet exist. Listing under the Endangered Species Act would provide much needed protection through sections 7 and 9 and the recovery process.

E. Other natural or manmade factors affecting its continued existence. Water quality degradation poses a serious threat to the yellow-blotched map turtle. This impact includes bioaccumulation of toxic materials and the loss of food organisms. The total effects of pollution and siltation upon map turtles have not been fully documented. However, the effects on insect larva and snails are well documented, and this group of organisms is the primary food source of all the narrow-headed map turtles (Cagle 1953, Ernst and Barbour 1972, Lahanas 1982). The reduced population of yellow-blotched map turtles in areas that have otherwise suitable habitat, but are polluted from some source, indicates

impacts to the food source. Water quality problems exist on the Leaf River from municipal runoff at Hattiesburg and dioxin contamination at New Augusta; on the Tallahala River from municipal runoff at Laurel; and on the Chickasawhay River from brine water releases from oil fields (R. Ball, Mississippi Bureau of Pollution Control, pers. comm. 1989). Permitted effluent to the Pascagoula River Basin include ammonia, chlorine, sodium sulfate, toluene, cyclohexane, and acetone (EPA 1989).

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the yellow-blotched map turtle as threatened. The threatened status is chosen due to the restricted range, sparse populations above the Pascagoula River, and water quality problems. Endangered status is not chosen because the species exists over many river miles in the Pascagoula River system and the known threats do not place it in imminent danger of extinction. Critical habitat is not being determined as discussed below.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires to the maximum extent prudent and determinable, that the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for this species. All Federal and State agencies are aware of the existence of this species and the importance of protecting its habitat. Protection of this species' habitat will be addressed through the recovery process and through the section 7 jeopardy standard. Commercial collecting is a potentially significant threat (see Factor B) and specific identification of its habitat through designation of critical habitat could increase the threat to this species. Therefore, it would not now be prudent to determine critical habitat for the yellow-blotched map turtle.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and

individuals. The Endangered Species Act provides for possible land acquisitions and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Federal involvement is expected to include the U.S. Army Corps of Engineers through its flood control projects and permits for water related activities, and the Environmental Protection Agency through the Clean Water Act provisions for pesticide registration, wastewater treatment, and permitted effluent discharge.

The Act and implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving

threatened wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22, 17.23, and 17.32. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, for incidental take in connection with otherwise lawful activities, and/or for prevention of undue economic hardship. For threatened species, there are also permits for zoological exhibition, educational purposes, or special purposes consistent with the purposes of the Act.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

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Author

The primary author of this rule is Ren Lohoefer (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.11(h) by adding the following, in alphabetical order under "REPTILES", to the List of Endangered and Threatened Wildlife.

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
REPTILES							
Turtle, yellow-blotched map (=sawback).	<i>Graptemys flavimaculata</i>	U.S.A. (MS).....	Entire	T	416	NA	NA

Dated: December 17, 1990.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

[FR Doc. 91-787 Filed 1-11-91; 8:45 am]

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50 CFR Part 17

RIN 1018-AB

Endangered and Threatened Wildlife and Plants; Listing of the Indus River Dolphin as an Endangered Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service is adding the Indus River dolphin (*Platanista minor*) to the List of Endangered and Threatened Wildlife. This measure, required by section 4(a)(b) of the Endangered Species Act of 1973 corresponds with the final determination of endangered status published in the **Federal Register** of December 11, 1990, by the National Marine Fisheries Service, which has jurisdiction for the Indus River dolphin.

EFFECTIVE DATE: January 11, 1991.

FOR FURTHER INFORMATION CONTACT: Dr. Larry Shannon, Chief, Division of Endangered Species, U.S. Fish and

Wildlife Service (452 ARLSQ), Washington, DC 20240; telephone (703) 358-2171.

SUPPLEMENTARY INFORMATION: Under the Endangered Species Act, the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, Department of Commerce, is responsible for the Indus River dolphin (*Platanista minor*). Under section 4(a)(2) of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) (Act), NMFS must determine whether a species under its jurisdiction should be classified as endangered or threatened. The Fish and Wildlife Service (FWS) is responsible for the actual addition of a species to the List of Endangered and Threatened Wildlife in 50 CFR 17.11(h).

On December 11, 1990, NMFS published (55 FR 50835-36) its determination of endangered status for the Indus River dolphin. Accordingly, the FWS is now adding the Indus River dolphin to the List of Endangered and Threatened Wildlife. Because this FWS action is nondiscretionary, the FWS finds that good cause exists to omit the notice and public comment procedures of 5 U.S.C. 553(b). The FWS also has determined that an Environmental Assessment, as defined by the National Environmental Policy Act of 1969, need

not be prepared in regard to regulations adopted under section 4(a) of the Act. A notice outlining the reasons for this determination was published in the **Federal Register** on October 25, 1985 (48 FR 49244).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Export, Import, Reporting and recordkeeping requirements, and Transportation.

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter 1, title 50 of the Code of Federal Regulations is amended as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

2. Section 17.11(h) is amended by adding the following, in alphabetical order under Mammals, to the list of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
Dolphin, Indus River	<i>Platanista minor</i>	Pakistan (Indus R. and tributaries).	Entire	E	417	NA	NA

Dated: January 8, 1991.

Bruce Blanchard,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 91-788 Filed 1-11-91; 8:45 am]

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